

Amendments to Claims

1. **(Cancelled)**

2. **(Currently Amended)** A system according to claim ~~[[1]]~~ 5 wherein said output of said reducing means comprises no more than about 0.4 grams/bhp/hr NO_x.

3. **(Currently Amended)** A system according to claim ~~[[1]]~~ 5 wherein said output of said reducing means comprises no more than about 0.28 grams/bhp/hr of non-methane hydrocarbons.

4. **(Currently Amended)** A system according to claim ~~[[1]]~~ 5 further comprising:

a heat exchanger for vaporizing engine fuel before said fuel is added into said mixture.

5. **(Currently Amended)** ~~A system according to claim 1 wherein said reformat means comprises~~ A system using reformat for reducing oxides of nitrogen (NO_x) in the exhaust of a hydrocarbon-fueled, internal combustion engine which operates with fuel from a source and air from an air inlet and which provides engine exhaust in an exhaust pipe, comprising:

reformat means having an inlet and an outlet for providing at said outlet a flow of said reformat including at least hydrogen, said means comprising a hydrogen generator and a tank of water, said hydrogen generator receiving, at an inlet of said hydrogen generator, fuel from said source and a mixture comprising air from said air inlet humidified by an air bubbler which humidifies air with moisture from said tank; and

NOx reducing means receiving said engine exhaust and said reformat for reducing the NOx in said engine exhaust to provide system exhaust with diminished NOx.

6. **(Original)** A system according to claim 5 wherein said air bubbler is separate from said tank.

7. **(Original)** A system according to claim 5 further comprising:
a heat exchanger receiving humidified air out of said air bubbler to heat the humidified air with hot engine exhaust.

8. **(Currently Amended)** A system according to claim [[1]] 5 wherein said NOx reducing means comprises at least one NOx trap, each NOx trap alternately trapping NOx in said exhaust and being regenerated by said outflow of reformat.

9. **(Currently Amended)** A system according to claim [[1]] 5 wherein said NOx reducing means comprises an NOx reducing catalytic converter.

10. **(Currently Amended)** A system according to claim [[1]] 5 wherein said hydrogen generator is selected from an auto-thermal reformer, a catalytic partial oxidizer and a homogeneous non-catalytic partial oxidizer.

11, 12. **(Cancelled)**

13. **(Currently Amended)** A method according to claim [[12]] 15 wherein:
said generating step comprises reforming a mixture containing vaporized fuel.

14. **(Currently Amended)** A method according to claim ~~[[13]]~~ 15 wherein:
said generating step comprises vaporizing fuel by heat exchange with said exhaust.

15. **(Currently Amended)** ~~A method according to claim 12 wherein:
said generating step comprises humidifying air in~~ A method of diminishing
oxides of nitrogen (NOx) in the exhaust of a system including a hydrocarbon-fueled
engine that provides engine exhaust containing NOx, said method comprising:
5 generating reformat from a mixture of air humidified by an air bubbling
humidifier receiving water from ~~said~~ a tank of water and engine fuel, to provide a
flow of reformat including hydrogen and carbon monoxide; and
using the flow of reformat for reducing NOx in said engine exhaust to
provide system exhaust with diminished NOx.

16. **(Currently Amended)** A method according to claim ~~[[12]]~~ 15 wherein:
said generating step comprises humidifying air in an air bubbling humidifier
which serves as said tank for said water.

17. **(Currently Amended)** A method according to claim ~~[[12]]~~ 15 wherein:
said step of reducing NOx comprises applying said exhaust and said flow,
contemporaneously, to a NOx reducing catalytic converter.

18. **(Currently Amended)** A system according to claim ~~[[12]]~~ 15 wherein:
said step of reducing NOx comprises alternately applying said engine
exhaust and said flow to at least one NOx trap, separately.